U.S. Department
of Transportation

**Research and
Special Programs
Administration**

DOT Task —

400 Seventh Street, S.W.
Washington, D.C. 20590

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MAR 18 1982

Mr. Henry D. Van Cleave
Acting Director
Emergency Response Division (WH-548-B)
U.S. Environmental Protection Agency
Washington, D.C. 20460

Dear Mr. Van Cleave:

This is in response to your memorandum of February 12, 1982, requesting comments on the report by Rockwell International, Inc. entitled "Designation and Assignment of Reportable Quantities for Radionuclides Pursuant to CERCLA Section 101(14)".

Before providing comments on the six radionuclide related "Key Issues" identified in your memo, I wish to reiterate the substance of my February 1, 1982, response to an earlier draft of the Rockwell report. In relation to releases of radioactive materials in transportation accidents, it is not practical or necessary to have radionuclide specific reportable quantities (RQ's) for all radionuclides. Secondly, existing regulations of this Department include requirements for reporting releases that are conservative and practical. The existing reporting and response systems are sufficiently effective for response to transportation accidents involving radioactive materials.

It seems inappropriate that a transportation scenario should be the model for computing RQ's that will also be used for fixed facility releases. There is some deficiency in assumptions or modeling concepts used even for transportation accidents, since the resulting RQ's for many radionuclides are too high to be safe for some realistic transportation situations. The RQ's in the report are too high to be used for triggering reporting/response systems. The establishment of radionuclide RQ's for releases in transportation or from fixed facilities must consider a number of scenarios and exposure pathways. The scenario in the Rockwell report that involved only exposure from "cloud shine" and inhalation illustrates the need for broader considerations.

First Key Issue

In relation to regulatory authority of agencies, this Department's primary statutory basis for regulating transportation of radioactive materials is the Hazardous Materials Transportation Act of 1974 (P.L. 93-633). Our comments on the earlier draft of the Rockwell report express our opinion on preferred reporting and response to releases of radioactive material during transportation.

Second Key Issue

The applicability of CERCLA to radioactive materials transportation accidents is being examined by our legal staff at the present time. Transportation accidents in the past have not been of such magnitude that CERCLA funds would be needed for final payment of cleanup costs. At some time in the future there might be a worst-case transportation accident requiring CERCLA funds for the cleanup and resolution of conditions. At the present time only those CERCLA resources necessary for receiving reports of releases and subsequent assessment of radiological consequences are the primary need.

Third and Fourth Key Issues

The RQ for any radionuclide should be any quantity released during transportation, as was stated previously.

Fifth Key Issue

We do not believe any of the alternatives are germane to a practical radionuclide RQ for releases in transportation.

Sixth Key Issue

We recognize that it is a difficult task to develop comprehensive and practical computational models. For purposes of transportation, we believe experience demonstrates that practical and effective response can be achieved without employing a highly sophisticated theoretically based system for dictating procedures to be followed in the event of a release. Two critical elements in the effectiveness of any reporting system are (1) the technical competence of the persons who receive the release reports, and (2) the quickness and simplicity of the system for reporting releases.

In summary, we believe radionuclide RQ's for releases in transportation and the reporting and response systems should essentially follow existing DOT regulations and procedures. There is a deficiency in the radionuclide RQ model employed by Rockwell since some of the RQ values could result in serious radiation exposures from released quantities that would not trigger a report.

If you have any questions or information about subjects that need our review, please contact Mr. Wendell Carriker of my staff on (202) 426-2311.

Sincerely,

Alan I. Roberts
Associate Director for Hazardous
Materials Regulation
Materials Transportation Bureau

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